Indiana Department of Natural Resources – Division of Forestry DRAFT

RESOURCE MANAGEMENT GUIDE

State Forest: Morgan-Monroe SF Compartment: 9 Tract: 01 Tract Acres: 129 **Commercial Forest Acres: 101**

Forester: D. Vadas Date: March 28, 201; Updated April 17, 2013

Management Cycle End Year: 2028 Management Cycle Length: 15 yrs

Location

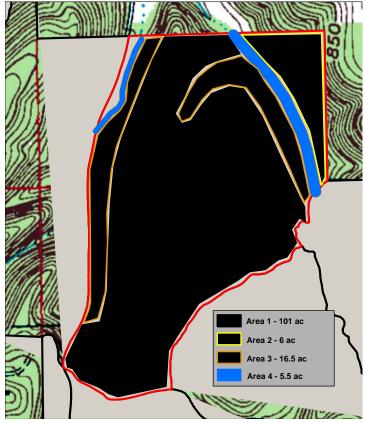
This tract is located in Sections 2 and 11 of Monroe County of Township 10N, Range 1E. It lies at the north end of the Yellowwood/Morgan-Monroe Backcountry Area. The tract lays north of Shipman Ridge. Geographically, the tract lies approximately 3.5 miles southwest of

Mahalasville, IN.

General Description

M0901 is a multiple use parcel of timberland comprising part of the 2,700 acre Backcountry area of Yellowwood/ Morgan-Monroe State Forest. Tract 1 contains 129 acres of the 1,330 acre portion of Compartment 9 that makes up Morgan-Monroe State Forest. This Tract is mostly surrounded by other State Forest timberland except for the northern part of the Tract which borders private forestland. M0901 is composed of predominantly closed canopy Oak-Hickory timberland with some scattered Mixed Hardwood areas. Overall, the tract's timber resource consists of White Oak, Black Oak, Red Oak and Yellow Poplar with some minor contributions in Scarlet Oak, Chestnut Oak and Sugar Maple. Tree quality is good to excellent on the northern and western slopes but only fair on the southwestern and western upper and midslope areas. Past harvesting was completed in 1971

Figure 1. **Designation of Management Areas of M0901**



and 1975 in portions of the Tract prior to the establishment of the MM Backcountry area. M0901 has been subdivided into 3 Management Areas based on access and its streamside corridors (See Figure 1.) Approximately 20 acres tend to be too steep for commercial harvest or reside in riparian drainages adjacent to Low Gap Road in the NE portion of the tract. About 8 other acres of the tract are generally inaccessible without modest roadwork and an intermittent stream crossing at the NE portion of the tract. Therefore the tract has

approximately 101 harvestable acres. The Tract's timber resource composition by structure & dominance is listed below in Table 1.

Table 1. Overview of Forest Resources in M0901 in April of 2004

| Overstory Layer | Understory Layer | Regeneration Layer |
|-------------------|-------------------|--------------------|
| White Oak | Sugar Maple | Sugar Maple |
| Black Oak | Red Maple | Red Elm |
| Northern Red Oak | White Oak | American Beech |
| Chestnut Oak | Sassafras | Sassafras |
| Scarlet Oak | Yellow Poplar | Red Maple |
| Yellow Poplar | Chestnut Oak | Ironwood |
| Sugar Maple | Pignut Hickory | Yellow Poplar |
| White Ash | Red Elm | Flowering Dogwood |
| American Beech | Northern Red Oak | Pignut Hickory |
| Blackgum | Black Oak | Blackgum |
| Pignut Hickory | Basswood | Other Hardwoods |
| Bitternut Hickory | American Beech | Chestnut Oak |
| Shagbark Hickory | Shagbark Hickory | White Oak |
| American Sycamore | Blackgum | Basswood |
| Black Walnut | Scarlet Oak | |
| Sassafras | Other Hardwoods | |
| Basswood | White Ash | |
| Other Hardwoods | Bitternut Hickory | |

History

Morgan-Monroe State Forest encompasses more than 24,000 acres in Morgan and Monroe counties in southcentral Indiana. The forest land encompasses many steep ridges and valleys, and is forested with some of the State's finest hardwoods. The original settlers of the area cleared and attempted to farm the ridges, but were frustrated by rocky soil unsuitable for agriculture. The State of Indiana began purchasing the eroded, abandoned fields and timberlands to create Morgan-Monroe State Forest in 1929.

This Tract was mostly acquired by Morgan-Monroe State Forest in 1930 (N, E & S portions) with the final portion (W central) being acquired in the summer of 1946. During the first 25 years of this tract's history, the Forest staff was predominantly occupied with acquiring other property or restoring degraded woodlands by active reforestation of eroded areas.

In the late 1960's the Forest Supervisor established Compartment and Tract boundaries for Morgan-Monroe State Forest and the present tract configuration included portions of what was known as Compartment 7 Tracts 1-6. In 1970 quick cruise inventories were completed in all of Compartment 7 by Property Manager/Forester Larry Smith. Tracts 1-6 were inventoried and timber type maps were prepared. The timber resource in 1970 was described as predominantly Mixed Oak-Hickory with 4 small areas dominated by Chestnut Oak and 1 bottomland stratum dominated by Yellow Poplar. Present volumes of these 6 tracts in 1970 ranged from 1137 BF/A to 4,963 BF/A with harvest volumes ranging from 606 BF/A to 1,880 BF/A. Data about the early sales conducted within the tract are

incomplete due to a loss of records from the MM Forest office fire in the early 1970's. Timber marking in C7 T4 of 38,340 BF in 313 trees was completed by Forester Smith and existing records indicate that this marking was sold in a combination Tract sale of 133,960 BF on 9/30/71 that included C7 Tracts 4, 6, 8 &11. Approximately 36,260 BF of timber was also sold from C7 T6 so approximately 74,600 BF of the timber volume in this sale was sold from the current tract. This combined Tract sale totaled 1,306 trees and was sold to Ken Welty for \$2,500.00 (Sale #7203). On 7/22/75 Property Manager/Forester Bill Hahn completed marking C7 T5 and a timber sale of 67,350 BF of sawtimber was sold to Joseph Woods for \$6,100.00 (Sale #7606). On the same day a WHO veneer sale of 6,717 BF in 19 trees in the Tract 5 was sold to Ken Welty of Spencer, IN for \$1,050.00 (Sale #7607). On July 30th of 1981 the Yellowwood/Morgan-Monroe Backcountry Area was designated by DNR Director James Ridenour. In April of 1987 roadwork improvements were completed by Forester Breedlove on the Shipman Ridge Compartment Road to improve drainage and reduce erosion. This access route has had routine road maintenance every 3 to 4 years as needed.

MM Compartment 7 was renamed to Compartment 9 Tracts 1-3 in November of 1989. As a result the current Tract 1 of 129 acres was created out of combining tracts 1-6 from the old Compartment 7. In April of 2004, Forester D. Vadas completed the first inventory of the current Tract 1 acreage. M0901 was subdivided into 3 possible management units: accessible harvest (Area #1 of 101A), steep slopes exclusion area (Area #2 of 20A), and the north inaccessible area (Area #3 of 8A). A preliminary prescription was completed by Forester Vadas in May 2004 along with inventory notes and a timber type map. The preliminary prescription was reviewed and approved by PM J. Allen on 6/16/04. In February of 2009 and March of 2011 Forester Vadas and forest intermittent Kaylee DeCosta added updated wildlife information to the preliminary prescription and completed the first management guide for the current Tract configuration. This draft guide was updated by Forester Vadas to its current status on April 17, 2013.

Landscape Context

The majority of land surrounding this Tract is closed canopy timberland of Morgan-Monroe State Forest with some privately owned property to the north and northeast that consists of mostly timberland, farmland and pastures. M0901 is located in the northern portion of the Yellowwood/Morgan-Monroe Backcountry Area which was established in 1981. The BCA is a designation for a remote area suitable for multiple use forestland, recreational hiking, & backcountry camping. Light residential development, farmland, pasture fields and timberland exist to the north and northeast of the Tract.

Topography, Geology and Hydrology

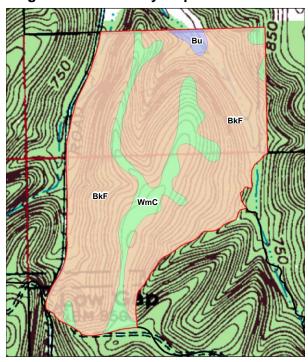
This Tract is comprised of one central ridge running north-south with one finger ridge branching from it that extends to the northwest. Topography ranges from nearly level to 75% slopes. East and West aspects dominate. Underlying soils range from 15 - 72 inches in depth to sandstone and/or shale bedrock. One mapped intermittent stream serves as the tract's western boundary. Another mapped intermittent stream runs along the east boundary into the north-eastern portion of the Tract. Several other unmapped ephemeral drainages occur throughout the Tract. The water resources from M0901 drain into Robertson Creek and from there into Indian Creek and then on into the White River.

Soils

The main soil types in M0901 are featured in Figure 2. A major portion of the Tract's soils are derived from unglaciated soils however some glacial tail deposits were observed at the top of the Tract's northwestern ridge in the form of rounded granite stones. Other MM Tracts to the west also show tailings from this last glacial period on the top of their ridges.

Bu (Burnside Silt Loam) This soil type is nearly level, deep, well drained on narrow floodplains in sandstone bedrock areas. It is subject to occasional flooding and so presents equipment limitations. This soil type comprises approximately 5% of the tract. This soil is well suited for the growing of Yellow Poplar, Red Oak, and Black Walnut trees. Erosion, equipment limitations, seedling mortality, and windthrow hazards are all slight for this soil type.

Figure 2. Soil Survey Map for M0901



BkF (Berks-Weikert Complex, 25-75% slopes) This soil type has steep to very steep slopes and moderately deep and shallow well drained soils on sideslopes. This Tract is comprised of approximately 75% of this soil type and presents moderate erosion hazards, severe equipment limitations, moderate to severe seedling mortality, and slight to moderate windthrow potential. Surface runoff of this soil is rapid. Haul roads should be constructed on contours to prevent erosion.

WmC (Wellston – Gilpin Silt Loams, 6-20% slopes) This soil type has moderately sloping to moderately steep, moderately deep and deep, well drained soils on ridgetops and sideslopes. Erosion, equipment limitation, seedling mortality, and windthrow hazards are all slight for this soil type. This soil types occupies approximately 20% of the tract.

Access

The best public access is available through a large steel gate directly across from the east end of Orcutt Road. There is a small parking area available opposite the steel gate. The best management access is from the east via a stoned roadway through the old Brunner Tract that emerges onto Upper Bear Creek Road. This road is currently in good condition with recent drainage improvements and stoning completed in CY2012.

Boundary

Private property borders the north and northeast portions of the tract otherwise the Tract's boundaries are drainages that make up normal Morgan-Monroe SF tracts. The north boundary of M0901 is not defined and needs survey assistance to more accurately locate it. The current line has been flagged and portions painted in for many years however the lack of a definitive corner location(s) at the NE or SE corners of the S1/2 of the SW1/4 of S2 of the Tract has hindered its posting. A property line survey is needed to establish and relocate these corners and a survey request was submitted by the Property in the 1990's. An old fence line is evident however along portions of this N boundary and has been used for the basis of the current marking and evaluation of the line. This N line was first run in the early 1980's by Forester Breedlove and was flagged. At present there are 3 separate possible encroachments along the North line. The western portion of the N line that crosses Low Gap Road has a possible field/pasture use encroachment. The northeastern portion of the N line has a more definite field use encroachment as well as a moderately large dumpsite. Lack of proper boundary evidence this far west on the North line has resulted in continued use of a portion of this field as well as some firewood cutting activity and dumping. There is also an actively used roadway usage encroachment crossing the State Property to a privately owned ridgetop to the east at the NE corner. The only boundary evidence noticed along the western part of the north line is an old, erratic fenceline as well as a Steel Fence Post (SFP) at the northeast edge of the field in the northeast area of the tract. This field encroachment looks like it could have been much larger in the past as poletimber trees are now growing in some of the area south of this SFP. The history of who set the SFP and why is unknown.

Wildlife

A spring breeding bird survey of a large portion of the BCA was conducted by Division of Forestry staff in May-June 2010 in adjacent tracts resulting in detections of the following bird species:

| Tufted Titmouse | Downy Woodpecker | Worm-eating Warbler (SC) |
|------------------------|------------------------------|--------------------------|
| Red-eyed Vireo | Swainson's Thrush | Kentucky Warbler |
| Eastern Wood-peewee | White-breasted Nuthatch | Carolina Chickadee |
| Tennessee Warbler | Black-pole Warbler | Yellow-throated Vireo |
| Acadian Flycatcher | American Crow | Blue-grey Gnatcatcher |
| Scarlet Tanager | Pileated Woodpecker | Wood Thrush |
| Brown-headed Cowbird | Ovenbird | Mourning Dove |
| Northern Cardinal | Black-and-white Warbler (SC) | Louisiana Waterthrush |
| Red-bellied Woodpecker | Chimney Swift | Blue Jay |
| Hooded Warbler (SC) | Ruby-throated Hummingbird | Cerulean Warbler (SE) |
| Hairy Woodpecker | Great Crested Flycatcher | Eastern Towhee |

These birds are likely present within M0901. Although present, RT&E species abundance rates were modestly lower in the adjacent tracts surveyed than that which has been documented in the HEE research areas on other parts of the Y-MMSF. A proposed timber harvest would encourage the growth of a denser understory and shrub layer component. This habitat type provides cover and nesting habitat for Worm-eating,

Hooded, and Black-and-White Warblers. According to the Indiana State Forest Environmental Assessment handbook, research in Indiana has shown that Cerulean Warblers do not show avoidance for harvested areas and also that canopy gaps may be an important component of Cerulean habitat. Preliminary findings from the Hardwood Ecosystem Experiment project, partly located on Morgan-Monroe SF, offer further evidence that Cerulean Warbler territories often include canopy gaps and openings. These birds would most likely be benefitted by a light timber harvest in this tract. A Natural Heritage Database review was obtained for this tract. If rare, threatened or endangered species were identified for this area, the activities prescribed in this guide will be conducted in a manner that will not threaten the viability of those species.

The only deficiencies found in the wildlife habitat feature summary completed for this tract were for snags in the "Available Above Maintenance" category and "Available Above Optimal" category as highlighted in red below. Many trees within the tract could likely become snags within the next few years due to mortality carrying over from the extreme drought during the fall of 2010. Timber Stand Improvement (TSI) can also focus on girdling and deadening cull trees in a postharvest operation to create snags. Additionally, snags are retained during timber harvests on state forests unless they pose a threat to the safety of state forest visitors or those working on the properties.

| Maintenance | Optimal Level | Above Level | Inventory | Above Maintenance | Optimal |
|------------------------|------------------|----------------|-----------|----------------------|---------|
| Legacy Trees * | | | | | |
| 11''+ DBH | 1215 | | 3460 | 2290 | |
| 20''+ DBH | 405 | | 731 | 341 | |
| Snags (all species) | | | | | |
| 5''+ DBH | 520 | 910 | 163 | -357 | -747 |
| 9''+ DBH | 390 | 780 | 163 | -227 | -617 |
| 19''+ DBH | 65 | 130 | 26 | -39 | -104 |

^{*} Species Include: AME, BIH, BLL, COT, GRA, REO, POO, REE, SHH, ZSH, SIM, SUM, WHA, WHO

Communities

A Natural Heritage Database review was obtained for this tract. If rare, threatened or endangered species were identified for this area, the activities prescribed in this guide will be conducted in a manner that will not threaten the viability of those species.

Recreation

The Backcountry Area provides a variety of recreational opportunities including hiking, hunting, mushrooming, wildlife viewing, and backpack camping. Very little recreational use of this portion of the BCA was observed by the inventory forester during the resource inventory in 2004. Following the recent road improvements into the Tract as well as the construction of the small yard there has been some increased use. After the proposed timber resource extraction it would be expected that the roadways into the tract would be improved and provide additional paths for hikers and campers to utilize. The

small yarding area on the central ridgetop following the harvest could be converted into an open air camping area not present in other areas of the BCA.

Cultural

Cultural resources may be present on this tract but their location is protected. Adverse impacts to significant cultural resources will be avoided during any management or construction activities.

M0901Tract Description and Silvicultural Prescription

M0901Tract Inventory Summary Data (April 2004 – 129 acres)

Total Trees/Ac.= 307 Overall % Stocking = 110% (Slightly Over-stocked)

Sawtimber & Quality Trees/Ac. = 41 Overall BA/A = 119.4 ft2/Ac.

Present Volume = 8,806 Bd. Ft./Ac. Harvest Volume = 3,330 Bd. Ft./Ac. Growing Stock Volume = 5,476 Bd. Ft./Ac.

Table 2. Harvest/Leave species and volume inventoried April 2004 in M0901

| Species | Harvest | Growing Stock | Total Volume |
|-------------------------------|---------|---------------|--------------|
| White Oak | 56,530 | 194,260 | 250,790 |
| Black Oak | 106,300 | 139,800 | 246,100 |
| Northern Red Oak | 57,680 | 114,740 | 172,420 |
| Yellow Poplar | 35,390 | 82,430 | 117,820 |
| Scarlet Oak | 63,090 | 28,980 | 92,070 |
| Chestnut Oak | 27,850 | 35,840 | 63,690 |
| Sugar Maple | 24,120 | 11,900 | 36,020 |
| White Ash | 18,340 | 10,850 | 29,190 |
| American Beech | 9,630 | 19,070 | 28,700 |
| American Sycamore | 5,640 | 19,200 | 24,840 |
| Blackgum | 10,220 | 9,050 | 19,270 |
| Bitternut Hickory | 0 | 13,760 | 13,760 |
| Pignut Hickory | 4,800 | 8,840 | 13,640 |
| Shagbark Hickory | 3,260 | 8,060 | 11,320 |
| Black Walnut | 0 | 8,150 | 8,150 |
| Sassafras | 3,570 | 0 | 3,570 |
| Other Hardwoods | 3,150 | 0 | 3,150 |
| Basswood | 0 | 1,410 | 1,410 |
| Tract Totals (Bd. Ft.) | 429,570 | 706,340 | 1,135,910 |
| Per Acre Totals (Bd. Ft./Ac.) | 3,330 | 5,433 | 8,806 |

The current Tract resource inventory was completed by Forester Vadas on April 1, 2004. 42 points were sampled over 129 tract acres (1 point for every 3.07 acres). The data

for the forest resource inventory are given above in Table 2. The forest stand and stocking table is summarized in the Gingrich Chart located below the Proposed Management section of this plan. Overall, the tract is heavy to the Oak-Hickory forest type that is typical on Morgan-Monroe State Forest with Mixed Oaks such as White Oak, Black Oak, Northern Red Oak, Yellow Poplar and Chestnut oak predominating by volume, respectively. Other areas within the Tract have modest populations of Mixed Hardwoods and Bottomland Hardwoods containing Yellow Poplar, Sugar Maple, White Ash, American Beech & American Sycamore. The lower understory is dominated by Red & Sugar Maples, American Beech, Sassafras and Ironwood. Very little harvest evidence remains from the 1971 & 1975 timber harvests as modest growth and canopy closure has occurred. The silvicultural methods that were used to evaluate the 2004 resource inventory included the possibility that group selection (regeneration) openings could be initiated if a harvest was conducted in the future. In 2007 a Division of Forestry Backcountry harvest guideline of no group selection (regeneration) openings was instituted across all of the DOF's State Forest Backcountry areas. As such, the present harvest data represented above will be modestly higher than the proposed future harvest. As this Tract is mostly represented by Mixed Oak-Hickory stratums, the potential harvest would be concentrated in the WHO, BLO, SCO, and REO species groups. As the maintenance of the overstory canopy of the Oak-Hickory component is desired in BCA forest areas the additional marking of understory American Beech, Red Maple and Sugar Maple may be warranted to allow some continued natural regeneration of the Mixed Oak group.

Currently, M0901 has experienced modest natural and unnatural ecological effects. Overall, about 1/3 of the tract has experienced moderate wildfire damage from the past ranging from light to heavy depending upon the slope and/or aspect. A recent fire (within the last 15 years) has affected the boles of some trees in the SW corner of the tract near Low Gap Road. A good portion of the Tract has experienced light to moderate windthrow as well. Particularly in 1991 portions of the southern 1/3 of the tract had moderate straight line winds in which some narrow areas have experienced natural regeneration. This blowdown had effectively blocked the old fire trail/harvest access used during the 1971 and 1975 timber sales with the result that most of this roadway had windfall remnants. As a result most of this northern portion of the Tract had legible use by hikers and backpack campers. These roadways were reopened in 2012 in preparation for the proposed harvest. Other scattered areas within M0901 have older blowdowns. Most of the trees in these areas blew down due to the inevitable results of mature trees being rooted on shallow soils overtopping shale bedrocks. In addition, natural senescence of Scarlet & Black Oaks has resulted in pockets of Oak mortality some of which may be a result of modest droughty periods within the last 15 years. For resource management M0901 has 3 Management Areas that will be addressed individually.

Management Area #1: Central Accessible Management Area (101 Acres)

Within Area #1 are the majority of the medium to large sawtimber Mixed Oak & Hickory timber type that contributes to the predominant timber stocking within the Tract. This Area also contains some small, scattered pockets of small sawtimber Chestnut Oak and Yellow Poplar. The White Oak component represented here have a fair representation of veneer quality (presently 937 BF/A) of which up to 25% are in need of harvesting. Twenty-four percent of the volume for harvest in this accessible portion of the Tract is in the small sawtimber size (14-18" dbh) in CHO, SCO, and BLO; 39% is in medium sawtimber size (19-

24" dbh) in BLO, SCO, and YEP; and 37% of harvest is in large and very large sawtimber sizes (25" + dbh) of mostly REO, BLO, and WHO species. The prescription for the proposed harvest will center on an intermediate cutting harvest to remove lower vigor, overmature individuals (Selection Thin) as well as harvest lower quality, low vigor, and poorly formed trees (Improvement Cutting). As wildfire damage is light to moderate within this Area unhealthy individuals should be marked for harvest to favor the larger & healthier individuals. High vigor trees are the best candidates to retain canopy closure within the BCA guidelines as they are best suited to fend off droughts, insect infestations and windthrow events. Scarlet Oaks occupy the drier sites within this area and they are rapidly approaching maturity. Additionally, other portions of this Area have sites with Black Oak and White Oak that also appears to be declining. These observations appear to be represent a successional shift in the overstory towards a higher WHO/SUM species component as well as a density dependent response to overly high stocking in basal area (Present stratum is listed as 119.4 ft2/A of basal area). According to the 2004 notes from the forest inventory no large areas in 2004 were in need of regeneration however some portions of this Area had moderate fire and windthrow damage that would have better been served by a regeneration harvest. These areas will now be marked lightly to favor a slow natural conversion to a more Mixed Hardwood forest component. Wild grapevine populations are fairly numerous within this Area and are planned for reduction in a postharvest TSI operation; many other nice WHO and other Oaks would also benefit from this removal operation. A Visual Enhancement Area and buffer will be observed along the southern portion of this Area to enhance recreational values along the Property's Low Gap & Tecumseh Hiking Trails that follow Shipman Ridge Firetrail.

Management Area #2: Northeast Mostly Inaccessible Management Area (6 Acres)

This Management Area of M0901 would preferably be better accessed for harvest through the north adjacent private owner via a smaller sale however there is potential access through the northern nose ridge of Management Area #1 where a skidtrail could be used to access the Area. A modest intermittent stream crossing would be needed there in the event this Area is harvested. According to the data from the 2004 inventory approximately 21,000 BF of volume could be harvestable. Most of this volume is in the WHO, SCO, SUM, and BLO species groups with a modest amount of veneer WHO represented. This Area will be reexamined during the marking of the Tract by the marking forester to evaluate whether the area is suitable for harvest. Timber Stand Improvement (TSI) that is planned to follow the harvest of Area #1 could release high quality growing stock and reduce grapevine populations in this Area. The removal of the dumping site and the establishment of a permanent property line following a property line survey is the longterm goals of this Management Area.

Management Area #3: Excessively Steep Reduced Harvest Area(16.50 Acres)

This Management Area occupies the steeper forested areas along the western edge of the Tract that lies adjacent to and along Low Gap Road as well as the steeper slopes along the northeast portion of the Tract adjacent to Management Area #2. Only singletree harvesting along the more accessible portions of this Area is planned in this management cycle. This type of harvest along with the application of BMP's will be taken to reduce soil movement and to reduce windthrow effects. Postharvest Timber Stand Improvement (TSI) is planned following the Tract harvest of Area #1 in this Area could release high quality

growing stock and reduce grapevine populations which are mostly prevalent along Low Gap Road. The TSI applied to cull trees in this Unit will also increase snag densities for Indiana Bat as well as provide habitat for woodpeckers and cavity nesting wildlife.

Management Area #4: Riparian Management Areas Prescription(5.5 Acres)

Two separate Riparian Management units were delineated following the resource inventory of M0901. These units consist of acreages that are defined as lying adjacent to the mapped intermittent streams along the Tract's Northwest boundary and Northeast boundaries. For the northwestern Riparian Area this unit is defined as lying within 50 feet of both sides of the mapped intermittent stream and consists of approximately 1.5 acres of a Mixed Hardwood component of medium to large sawtimber timber. As there was very little acreage between the Low Gap Road and the intermittent stream the whole area northwest of this stream was included in the Riparian Management Area for this management cycle. For the northeastern Riparian Area this unit is defined as lying within 50 feet of both sides of the mapped intermittent stream and consists of approximately 4.0 acres. This unit includes some Bottomland Hardwoods with timber in pole to large sawtimber sizes. A portion of this NE unit is in one of the encroachment areas mentioned in the Boundary Section of this plan and has regenerated into poletimber Yellow Poplar. Specific data about timber volumes and species within both of these Areas could not be derived as they were not segregated in the original Tract inventory in 2004. During this management cycle no harvesting or TSI projects are planned in either of these two Riparian Management Areas.

Proposed Management

The DOF's BCA harvest guidelines dictate an unevenaged management system using only singletree selection silvicultural treatments with no planned regeneration openings. Improvement cuttings, release cuttings and some selection cuttings could be prescribed. The objective in marking of this Tract would be to retain a mostly closed-canopy overstory condition along with promoting the growth of larger and/or more vigorous trees. These trees would be the best candidates for fitting the model for a longterm, closed canopy forest condition that is desired in a Backcountry Area setting. Trees selected for the proposed harvest would include dying, suppressed, poorly formed & low vigor trees to improve the spacing and growth of mostly larger, healthier or more desirable growing stock. Healthy large-diameter trees would be assessed for vigor, retained whenever possible and lightly released. The removal of Sugar Maples infected with Sugar Maple borer is also recommended. Consideration would be taken during marking to retain and release the longer-lived tree species such as White Oaks, Chestnut Oaks and Hickories that offer higher wildlife value and mast production. Portions of the creek bottoms that were noted to have modest grapevine growth would be prescribed additional TSI to release Black Walnuts and other valuable tree species. A harvest of between 175 to 250 MBF within the Tract is possible and a 15-20 year management cycle is recommended. At this time the proposed harvest is scheduled for late FY2012-13. The proposed harvest could be restricted to late fall and winter periods to allow a normal use of the area for recreational activities.

Proposed Activities Listing

Activity

Road access and sale area in

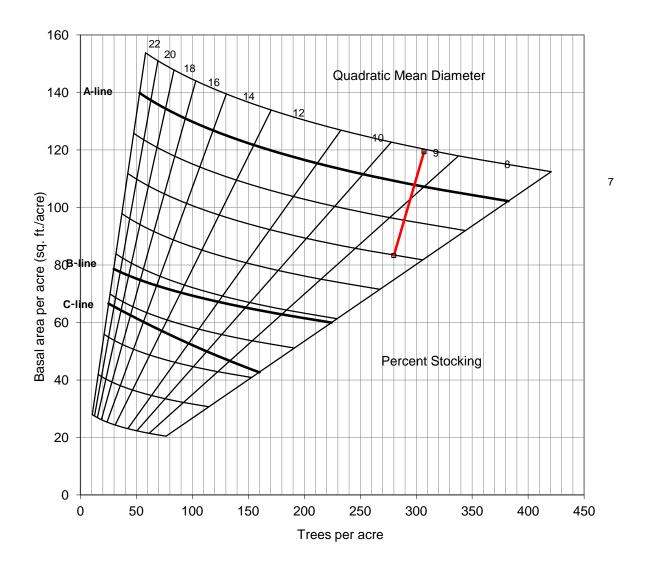
Road access and sale area improvements Timber Marking

Proposed Time Period

CY2012-13 FY2012-13

| Timber Sale | FY2012-13 |
|--|-----------|
| Timber Harvest | CY2013-15 |
| BMP Review | CY2013-16 |
| Postharvest Timber Stand Improvement Project | CY2013-16 |
| Timber Reinventory & Management Planning | CY2027 |

Figure 3. Gingrich Stocking Chart for April 2004 Resource Inventory



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You must indicate the State Forest Name, Compartment Number and Tract Number in the "Subject or file reference" line to ensure that your comment receives appropriate consideration. Comments received within 30 days of posting will be considered.

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